



# SAW Components

Data Sheet B7848





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**B7848**

**Low-Loss Filter for Mobile Communication**

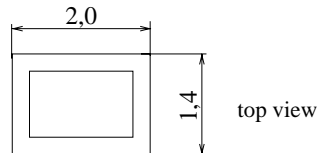
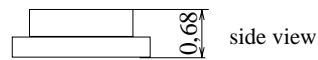
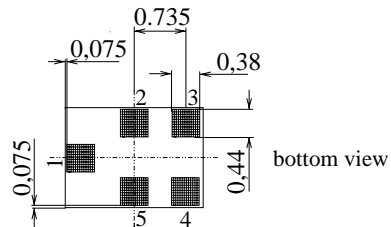
**860,5 MHz**

**Data Sheet**

**Features**

- Low-loss RF filter for iDEN phone, receive path
- Low amplitude ripple
- Usable passband 19,0 MHz
- No matching network required for operation at 50 Ω
- Ceramic package for **Surface Mounted Technology (SMT)**

**Chip sized SAW package QCS5C**



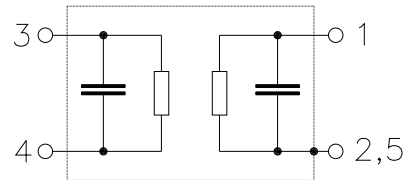
Dimensions in mm, approx. weight 0,009 g

**Terminals**

- Ni, gold-plated

**Pin configuration**

- 1 Input, unbalanced
- 4 Output, unbalanced
- 2, 5 Case ground
- 3 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7848	B39861-B7848-C710	C61157-A7-A111	F61074-V8151-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	- 30 / + 85	°C	Machine Model, 10 pulses source impedance 50 Ω
Storage temperature range	$T_{stg}$	- 40 / + 85	°C	
DC voltage	$V_{DC}$	0	V	
ESD voltage	$V_{ESD}$	100*	V	
Source power (cw)	$P_s$	0	dBm	

\* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



Data Sheet

Characteristics

Operating temperature range:  $T = +25 \pm 2 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

		min.	typ.	max.	
<b>Nominal frequency</b>	$f_N$	—	860,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$				
851,0 ... 870,0 MHz		—	1,9	2,7	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
851,0 ... 870,0 MHz		—	0,5	1,0	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$				
851,0 ... 870,0 MHz		—	20	50	ns
<b>Return loss (Input and Output)</b>					
851,0 ... 870,0 MHz		11	14	—	dB
<b>Attenuation</b>	$\alpha$				
0,100... 806,000MHz		45	55	—	dB
806,000... 825,000MHz		37	51	—	dB
896,000... 902,000MHz		28	42	—	dB
905,825... 924,825MHz		27	51	—	dB
960,650... 979,650MHz		37	57	—	dB
1070,300...1089,300MHz		47	55	—	dB
1089,300... 3000,000MHz		27	39	—	dB



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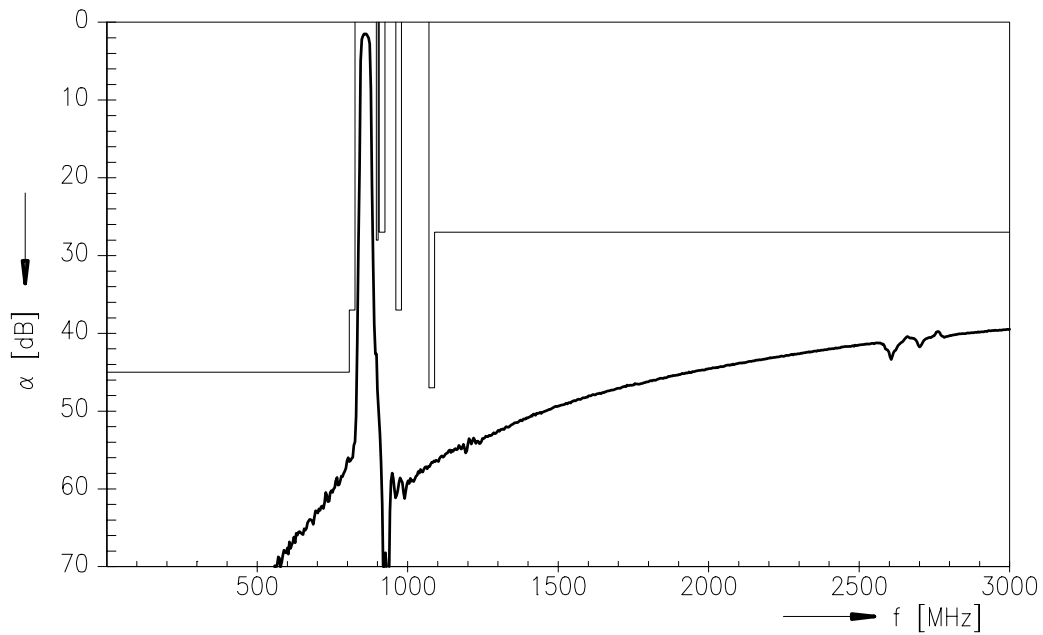
Operating temperature range:  $T = -30$  to  $+70$  °C  
 Terminating source impedance:  $Z_S = 50 \Omega$   
 Terminating load impedance:  $Z_L = 50 \Omega$

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Nominal frequency</b>	$f_N$	—	860,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$				
851,0 ... 870,0 MHz		—	2,2	3,0	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
851,0 ... 870,0 MHz		—	0,6	1,0	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$				
851,0 ... 870,0 MHz		—	30	60	ns
<b>Return loss (Input and Output)</b>					
851,0 ... 870,0 MHz		11	13	—	dB
<b>Attenuation</b>	$\alpha$				
0,100... 806,000MHz		45	55	—	dB
806,000... 825,000MHz		37	51	—	dB
896,000... 902,000MHz		28	42	—	dB
905,825... 924,825MHz		27	51	—	dB
960,650... 979,650MHz		37	57	—	dB
1070,300...1089,300MHz		47	55	—	dB
1089,300... 3000,000MHz		27	39	—	dB

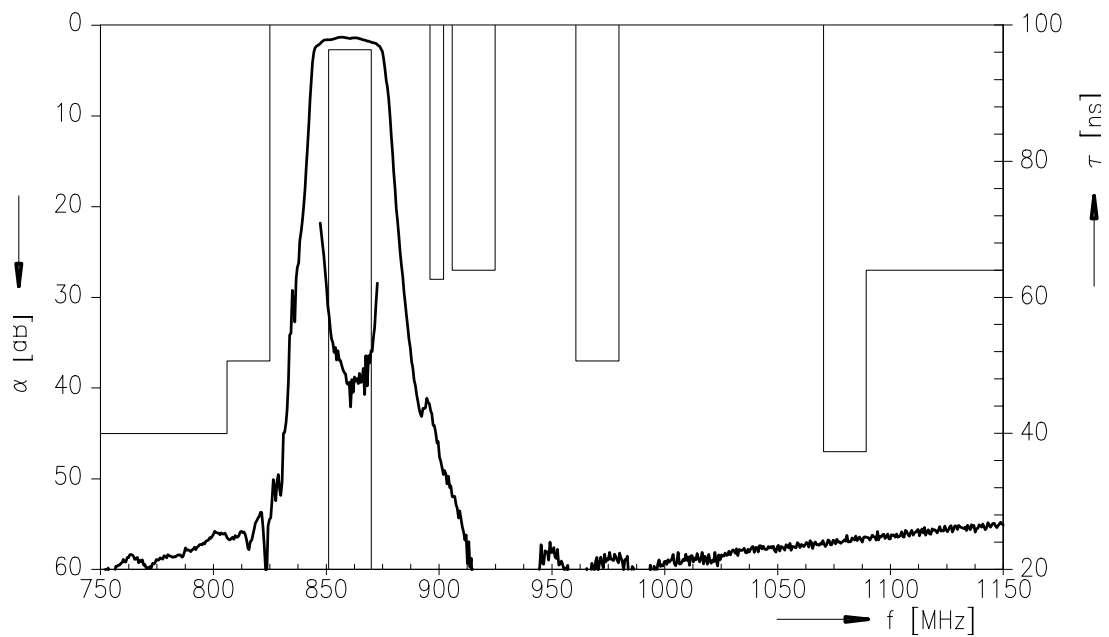


Data Sheet

Transfer function



Transfer function (pass band)





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